

**Abstract**

The present invention relates to a semiconductor device arranged at a surface of a semiconductor substrate having an initial doping having an electrical connection comprising at least one plug made of a material with a high conductivity, especially a material other than the substrate, especially a metal plug, between said initially doped substrate and said surface of the substrate. The device has at least one ground connection arranged to be connected to a ground pin on a package. The ground connection is arranged to be connected to said ground pin using said electrical connection, where the initially doped substrate is arranged to be connected to said ground pin via a reverse side of the substrate, opposite said surface, and thereby being arranged to establish a connection between said ground connection and said ground pin.